



Cliff Notes

The official newsletter of
Tonto National Monument
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Tonto Receives Grant for Archeological Research

The addition of an archeologist at Tonto National Monument in 2003 has revived interest in archeological research at the Monument. There had not been an archeologist on staff for over 30 years. The park's operational budget provides funds for ruins preservation only, not research. A grant received this year from the Western National Parks Association (WNPA) will help the park improve visitor services, enhance scientific knowledge about archeological resources in the park, and meet management goals. The grant will be used to reanalyze a portion of the Monument's existing museum collections (artifacts in storage) and extend a project already underway by the National Science Foundation (NSF).

Some information being used for interpretation at the park is over 50 years old. The museum exhibits were last updated when the current visitor center was built in 1964. The project will enable a more accurate reconstruction of prehistoric life at the cliff dwellings for which the park was established in 1907. It will also provide up-to-date information for the current planning efforts for new museum exhibits in the visitor center and the replacement of some signs along the Lower Cliff Dwelling trail.

The outcome of this research has the potential to change interpretation regarding the role of northern Puebloan immigrants in the Tonto Basin and to further our understanding of the apparent migration of the inhabitants of the cliff dwellings by A. D. 1450.

What Can A Perforated Plate Tell Us About Migration?

In 2005, staff at Tonto National Monument collected artifacts that were lying on the surface at the Upper Cliff Dwelling. Several piles of artifacts that had accumulated for decades were collected and sent to Arizona State University (ASU) for analysis. Among these artifacts were pieces of a perforated plate. Similar pieces were also unearthed during the original excavations conducted at the site in 1940.

Archeologists have concluded that perforated plates were used for making pottery. The plates served as turntables for shaping and building vessels while keeping them in a convenient working position. The holes, or perforations may have helped to drain excess water from the vessels during the drying process. Perforated plates appear to have originated in the Kayenta area in northern Arizona and have been associated with "potters' burials" (the plates were among other objects used for making pottery).

One theory proposes that specialization developed among immigrant groups as a means to offset their lack of access to agricultural land. Producers of Salado polychrome pottery may have arrived with a marketable product in hand and found a willing group of consumers. Perforated plate fragments found at the Upper Cliff Dwelling are contributing to a new "pile" of growing evidence for the presence of northern immigrants at sites in many areas of central and southern Arizona.

Trade and the "Salado Heartland"

Archeologists have long debated whether Salado pottery was made by a single, culturally unified group in the Southwest. The source of the pottery was generally believed to be the Tonto - Globe area which was described as the "heartland" of the Salado culture. It was assumed to be the source where the pottery was made because large amounts of the pottery was found there. An alternative explanation for such widespread distribution of the pottery could be the migration of the group making it over a very large area.

Current research indicates local manufacture of the pottery at many sites spread throughout the southwest. Salado pottery has been recovered from an area of nearly 80,600 square miles of Arizona, New Mexico, and northern Mexico. This area encompassed all major southwestern groups: the Ancient Puebloans and Hohokam, making it the most widely distributed pottery type in southwestern prehistory.



Gila Polychrome Bowl

Protecting the Past

Preservation and stabilization efforts are ongoing at Tonto National Monument in order to preserve the cliff dwellings for the enjoyment of future generations. Here are a few highlights of recent projects:

Lower Cliff Dwelling Slope Preservation Project

In April 2005, the steep slope located below the Lower Cliff Dwelling was partially stabilized by adding another masonry retaining wall. This section of the slope is comprised of historic backdirt which was scattered downslope during excavation projects in 1937 and 1950. Heavy rains in the last two years have contributed to erosion of the steep slope. During this process, prehistoric artifacts are occasionally exposed and distributed downslope. The close proximity of the artifacts to the trail was a concern.



New retaining wall below the Lower Cliff Dwelling provides stabilization for the slope.

Historic American Building Survey/Historic American Engineering Record (HABS/HAER) Documentation

Kevin Harper, an archaeologist from the National Park Service Southern Arizona office (SOAR) and Rodney Harrison, a freelance photographer, took photographs of the upper and lower cliff dwellings for the HABS/HAER project in 2004. HABS/HAER documentation consists of measured drawings, photographs, and written histories for a permanent collection archived at the Library of Congress. A single large format black and white photograph taken from the right vantage point records the historic resource and places it within the context of its surroundings.



Large format photo provides an overall view of the Upper Cliff Dwelling.

Lower Cliff Dwelling Emergency Preservation Project

In June 2005, cultural resources staff stabilized several areas in the Lower Cliff Dwelling that had sustained damage from visitor use and animal impacts. Sections of walls in several rooms and the hallway were repaired with plaster patches. Many of the steps that are in the dwelling for visitor convenience were also repaired.

High Resolution (6mm) 3D Architectural Models Using Laser Scanning Technology

This ongoing project involves aerial photography, topographical mapping and laser scanning of the lower and upper cliff dwellings, the historic trails architecture, and several other significant sites in the Monument to provide architectural profiles and plan view maps. All scanning was referenced so that wall heights, stone locations, and room features are in the park coordinate system for integration with the topographical data. A digital 3D model of each site was created which provides highly accurate baseline documentation and digital 2D and 3D graphic information. This makes the process of future documentation, stabilization, and assessments more efficient and accurate.



Joe Nicoli of Western Mapping operating the laser scanning equipment .

Upcoming Projects in 2006

- Preservation treatments including plaster patches, repair of eroding wall surfaces, and drainage control at the Lower Cliff Dwelling.
- Condition assessments and removal of vegetation to prevent possible fire impacts to backcountry archeological sites in the Monument.

Calendar of Special Tours & Events

February

Sat. 4th 2 pm Cline Terrace Platform Mound Tour
Sun. 12th 5:30 pm Upper Cliff Dwelling Full Moon Hike
Sat. 18th 2 pm Besh Ba Gowah Tour
Mon. 20th 1:30 pm Ranger Talk
Sat. 25th 2 pm Schoolhouse Platform Mound Tour

March

Sat. 4th 2 pm Schoolhouse Platform Mound Tour
Sat. 11th 2 pm Besh Ba Gowah Tour
Fri. 17th 7:30 pm Star Stories Program (off-site)
Sat.-Sun. 18-19th OPEN HOUSE
Sat. 25th Field Institute

April

Sat. 1st 11 am Schoolhouse Platform Mound Tour
Sat. 22nd 11 am Besh Ba Gowah Tour

May

Sat. 6th 8 am Early Bird Upper Cliff Dwelling Tour
Sat. 13th 8 am Early Bird Upper Cliff Dwelling Tour
Sat. 20th 8 am Early Bird Upper Cliff Dwelling Tour
Sat. 27th 8 am Early Bird Upper Cliff Dwelling Tour

Call the Monument for further information and directions to off-site tour sites (928) 467-2241.

**Help preserve history by leaving artifacts where you find them.
The secrets to our future may lie buried in our past.**

Upper Cliff Dwelling Tours

- Tours of the Upper Cliff Dwellings are offered every Saturday and Sunday from November through April. Mondays and Fridays are added as the season progresses to accommodate demand. See page 4 for more details.
- Early Bird tours of the Upper Cliff Dwelling are offered on Saturdays at 8 am in October and May.
- Full moon evening hikes to the Upper Cliff Dwelling will be offered once a month from November through February. They are similar to the daytime hike, but are shorter in length because of the darkness. Hikers need to be fit to do this tour because of the quicker pace.

Open House

- Twice a year, the Upper Cliff Dwelling is open to visitors without a guide for an entire weekend. Uphill travel on the trail is allowed between the hours of 9 am and 2 pm. Regular fees will be charged both days during Open House weekends. There is no fee if you have a National Park pass, Golden Eagle, Golden Age, or Golden Access passport.

Field Institute

- A pilot interpretive program will be offered through the Western National Parks Association (WNPA) for a fee on March 25th. This first program will explore the history and significance of Roosevelt Dam, will include lunch, and last most of the day. Look for a wide variety of programs in the future if the field institute concept is adopted. Call Tonto National Monument (928) 467-2241 or WNPA (520) 622-1999 to obtain more information or to sign up for the pilot program.

Off-Site Tours

- Off- site tours are offered through agreements with Tonto National Forest and Besh Ba Gowah Archaeological Park.
- The **Schoolhouse Platform Mound** site is unique in that it was occupied for over 100 years while other settlements in the basin were smaller and were occupied only briefly. People from neighboring villages apparently moved to the Schoolhouse Platform Mound. Why?
 - The **Cline Terrace Platform Mound** site is similar to other sites along the Salt River but it also has several distinct characteristics. There is a massive compound wall around the complex, and many of the walls are constructed of white gypsum. The site must have been quite impressive in the moonlight.
 - **Besh Ba Gowah** is a reconstructed ruin located in the city of Globe. You can walk in the rooms, climb recreated ladders, and enter a typical living area. There is also a museum and ethnobotanical garden at Besh Ba Gowah. The site is on flat ground; there is a \$2.00 per person entry fee.



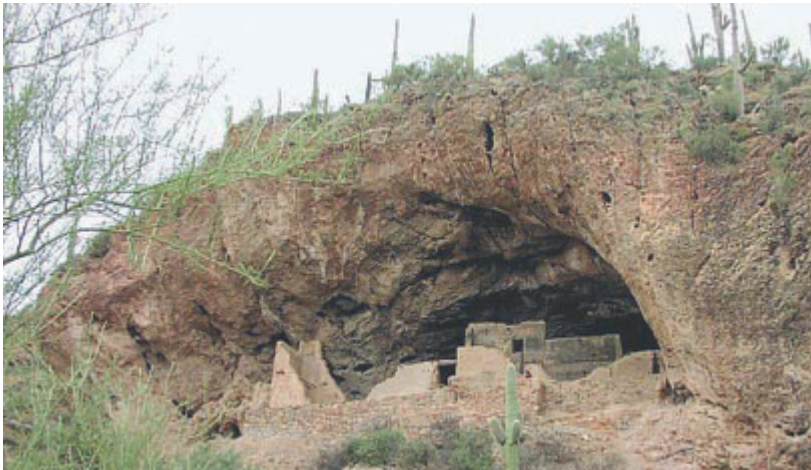
Visitors enjoy a tour of Besh Ba Gowah with Park Ranger Eddie Colyott .

Plan Your Visit

Tonto National Monument is located 30 miles northwest of Globe on Highway 188. Driving time from Phoenix, Scottsdale or Mesa is approximately 2 to 2 1/2 hours; from Tucson or Flagstaff 3 to 3 1/2 hours.

Self-Guided Lower Cliff Dwelling Trail

A paved trail winds its way through the Sonoran desert to the Lower Cliff Dwelling. You gain 350 vertical feet, so be prepared for a steep climb. Signs along the trail provide information about desert plants, the geology of the area, and the lives of the ancient Salado. There are several benches on the path. Sit and enjoy the beautiful view of Roosevelt Lake. Once you arrive at the dwelling, enjoy walking through homes that were occupied 700 years ago. The Cactus Patch Trail branches off the main trail and ends in the parking lot. Learn how desert plants have adapted to desert conditions and how the Salado used these plants to provide food, shelter, and clothing. Bring water, sunscreen and a hat with you. The one mile roundtrip walk takes about an hour to complete so plan to arrive at the park no later than 4 pm. Allow extra time to visit the museum, bookstore, and watch the video.



Lower Cliff Dwelling

The Visitor Center has a small museum, bookstore, viewing deck, and 18 minute orientation video and is open daily (except Christmas Day) from 8 am to 5 pm. The park also has a picnic area for your enjoyment with restrooms .

Upper Cliff Dwelling Tours



Upper Cliff Dwelling

During the winter season (November through April), rangers give guided tours to the Upper Cliff Dwelling. Tours are offered every weekend. Additional weekday tours are added as visitation increases. This 3 mile roundtrip backcountry trail travels in a creekbed through a riparian area, then gains 600 feet in elevation by way of switchbacks. The tour lasts 3-4 hours and reservations are required. There is no extra fee for the tour. Three hour full moon hikes to the Upper Cliff Dwelling are offered November through February and reservations are required.

FOR RESERVATIONS OR INFORMATION CALL THE MONUMENT AT (928) 467-2241.

See page 3 for a Schedule of Special Events & Tours.

Volunteers-In-Parks

The Monument is seeking volunteer assistance at the information desk and in the Lower Cliff Dwelling. Volunteers may also have the opportunity to help remove invasive plants, assist our archeologist with field work and archival research, or help with trail maintenance and other projects. During spring, summer and fall, you may assist in the field with ongoing reptile research.

If you are interested in any of these opportunities, contact our volunteer coordinator:

Susan Hughes, Chief Ranger (928) 467-2241.

Western National Parks Bookstore

Open daily 8 am to 5 pm (except Christmas Day)
WNPA members receive a 15% discount

Visit the online bookstore at www.wnpa.org



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